## **Amendments to the Claims:**

The following listing of claims replaces all prior listings, and prior versions, of the claims.

## **Listing of Claims:**

1 - 16 (cancelled)

17. (previously presented) An orientable longitudinal structure comprising:

substantially longitudinal actuators made of shaped memory alloy, n-doped and p-doped Peltier elements and electric operating means;

said actuators being arranged in pairs and positioned antagonistically; and

each said actuator being in contact substantially at its ends with an n-doped Peltier element and a p-doped Peltier element, respectively.

- 18. (previously presented) The orientable longitudinal structure as claimed in claim 17, wherein said actuators are leaves, preferably one-piece leaves.
- 19. (previously presented) The orientable longitudinal structure as claimed in claim 18, wherein said leaves are one-piece leaves.
- 20. (previously presented) The orientable longitudinal structure as claimed in claim 17, wherein each said n-doped and p-doped Peltier element is in contact with a partially annular conducting element.
- 21. (previously presented) The orientable longitudinal structure as claimed in claim 20, wherein said conducting element is made of copper.

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22. (previously presented) The orientable longitudinal structure as claimed in claim 20,

wherein each said n-doped and p-doped Peltier element is welded to said conducting

element.

23. (previously presented) The orientable longitudinal structure as claimed in claim 17,

wherein said actuators, associated with the Peltier elements, are positioned diametrically

opposite each other with respect to a longitudinal axis of the structure.

24. (previously presented) The orientable longitudinal structure as claimed in claim 17,

wherein said actuators are welded to said n-doped and p-doped Peltier elements.

25. (previously presented) The orientable longitudinal structure as claimed in claim 17,

wherein said actuators are made of nickel titanium (NiTi) alloy.

26. (previously presented) The orientable longitudinal structure as claimed in claim 17,

wherein said Peltier elements are made of bismuth telluride.

27. (previously presented) The orientable longitudinal structure as claimed in claim 17,

further comprising epoxy resin covering said Peltier elements including thermoelectric

junctions with said actuators.

28. (currently amended) An endoscope comprising a longitudinal body having, at its

distal end, a viewing system, wherein at least part of the longitudinal body is formed

using at least one orientable longitudinal structure as claimed in claim 17.

29. (previously presented) The endoscope as claimed in claim 28, wherein at least part of

the longitudinal body is formed of a plurality of said orientable structures, said orientable

structures being stacked on top of one another in such a way that a conducting element of

one of said orientable structures bearing the n-doped elements is adjacent to a conducting

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element bearing the p-doped Peltier elements of an adjacent orientable structure.

30. (previously presented) The endoscope as claimed in claim 28, wherein the actuators

of at least one orientable structure present, with the actuators of another orientable

structure, deform in different directions.

31. (previously presented) A method of manufacturing an orientable longitudinal

structure as claimed in claim 18, wherein said method comprises, in succession:

preparing SMA actuators consisting in cutting leaves presenting a curved shape

from a sheet of SMA, said curved shape of the leaves corresponding to a "memorized"

shape;

cooling said leaves until substantially straight leaves are obtained; and

assembling said leaves obtained during the previous step with said Peltier

elements, said assembly step consisting in incorporating said leaves between said n-

doped and p-doped Peltier elements.

32. (previously presented) The manufacturing method of claim 31, wherein said cutting

step comprises cutting said leaves from a sheet of SMA made of NiTi.

33. (previously presented) The manufacturing method as claimed in claim 31, further

comprising assembling said Peltier elements with partially annular conducting elements.

34. (previously presented) The manufacturing method as claimed in claim 31, wherein

the assembly steps comprising welding said leaves to said Peltier elements.

35. (previously presented) The manufacturing method as claimed in claim 31, further

comprising pouring resin to cover said Peltier elements, including thermoelectric

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junctions with said actuators.

36. (new) A stack of orientable longitudinal structures comprising a plurality of

longitudinal structures according to claim 17, and each of said longitudinal structures

being identical and electrically connected to a previous one of said longitudinal structures

or to a next one of said longitudinal structures with a possibility of orientation about a

longitudinal axis of said stack.

37. (new) A stack of orientable longitudinal structures according to claim 36, wherein a

conducting element of a structure bearing the n-doped elements is adjacent to a

conducting element bearing the p-doped Peltier elements of the previous one of said

longitudinal structures.

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